



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/768,415

01/30/2004

Philip Emery

7015

6942

7590
Gauthier & Connors, LLP
Suite 3300
225 Franklin Street
Boston, MA 02110

08/24/2007

EXAMINER

SHEWAREGED, BETELHEM

ART UNIT

PAPER NUMBER

1774

MAIL DATE

DELIVERY MODE

08/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/768,415	Applicant(s) EMERY ET AL.	
	Examiner Betelhem Shewareged	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25,27,28,30,31 and 33-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25,27,28,30,31 and 33-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on 06/07/2007 has been fully considered.
2. Claims 1-24, 26, 29 and 32 are canceled, claim 25 is amended, and thus claims 25, 27, 28, 30, 31 and 33-46 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25, 27, 28, 30, 31, 33-39 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 5,190,609) in view of Shih (US 5,824,398), Ast (US 6,248,427 B1) and Huguen et al. (US 5,747,192).
5. Lin discloses a heat shrinkable label comprising a backing sheet (col. 2, line 42), a first pressure sensitive adhesive (PSA) on the backing layer (col. 2, line 56), a first shrinkable layer on the first PSA (col. 2, line 44), graphics on the first shrinkable layer (col. 3, line 23), a second pressure sensitive adhesive (PSA) on the graphics (col. 3, line 32), and a second shrinkable layer on the second PSA (col. 2, line 44). The first and second shrinkable layers are made of polypropylene (col. 2, line 45). The thickness of the shrinkable layer is 1.25 mils (col. 4, line 63).

Art Unit: 1774

6. With respect to the claimed stiffness value, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the stiffness value in order to optimize the integrity of the film. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.
7. Lin does not teach the claimed onset shrinkage temperature value. However, Shih teaches a shrink film having an onset shrink temperature of 64 degree C or less (Examples and Table II). Lin and Shih are analogous art because they are from the same field of endeavor that is the shrink film art. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Shih with the invention of Lin, and the motivation would be, as Shih suggests, to provide a shrink film having heat resistance, stress crack resistance and excellent melt flowability (col. 7, lines 24-26).
8. Lin does not teach the use of polystyrene as the shrinkable layers. However, Ast teaches adhesive label comprising a shrinkable cover foil that can be made of polypropylene, polystyrene, polyethylene or polyester (col. 3, lines 37-42).
9. Lin and Ast are analogous art because they are from the same field of endeavor that is the heat shrinkable label art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use polystyrene to make the shrinkable layers of Lin since the examiner takes Official Notice of the equivalence of polyethylene

Art Unit: 1774

and polystyrene for their use in the heat shrinkable art and the selection of any of these known equivalents to make the shrinkable layers would be within the level of ordinary skill in the art.

10. With respect to the shrink and growth direction of the label, it is well known in the shrinkable label art for the label to be applied on a battery to shrink up to 60% in the direction normal to the axis of the battery, and to shrink -2 to +5% in the axial direction, wherein negative shrinkage means elongation. Such characteristics are well known in the art before the claimed invention (see col. 5, lines 19-36 of Huguen).

11. Claims 25, 27, 28, 30, 31, 33-43, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ast (US 6,248,427 B1) in view of Shih (US 5,824,398) and Huguen et al. (US 5,747,192).

12. Ast discloses an adhesive shrinkable label comprising a carrier (col. 4, line 17), an adhesive on the carrier (col. 4, line 15), a carrier material on the adhesive (col. 4, lines 7-13), wherein the carrier material comprises metallic layer and non-metallic layer, a laminating adhesive on the carrier material (col. 5, line 52), imprints on the laminating adhesive, and a shrinkable cover foil on the imprint (col. 3, line 39). Ast does not teach the claimed onset shrinkage temperature value. However, Shih teaches a shrink film having an onset shrink temperature of 64 degree C or less (Examples and Table II). Ast and Shih are analogous art because they are from the same field of endeavor that is the shrink film art. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Shih with the invention of Ast, and the

Art Unit: 1774

motivation would be, as Shih suggests, to provide a shrink film having heat resistance, stress crack resistance and excellent melt flowability (col. 7, lines 24-26).

13. With respect to the claimed stiffness value, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233.

One of ordinary skill in the art would have been motivated to adjust the stiffness value in order to optimize the integrity of the film. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

14. Ast teaches the shrinkable cover foil has a thickness of 20-70 micrometer (0.02-0.07mm) (col. 3, line 43 of Ast). Ast discloses that the shrinkable foil can carry additional layers on top and bottom side (col. 3, line 63). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add a transparent protective layer on the external side of the shrinkable cover foil so as to protect the foil during manufacturing, packaging, and/or transportation because adding a protective layer is on a laminate and/or a label is well known in the laminate and/or label art.

15. With respect to the shrink and growth direction of the label, it is well known in the shrinkable label art for the label to be applied on a battery to shrink up to 60% in the direction normal to the axis of the battery, and to shrink -2 to +5% in the axial direction, wherein negative shrinkage means elongation. Such characteristics are well known in the art before the claimed invention (see col. 5, lines 19-36 of Huguen).

Response to Arguments

16. Applicant's arguments with respect to claims 25, 27, 28, 30, 31 and 33-46 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Fri. 8:00AM-4:30PM.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BS
August 19, 2007.


BETELHEM SHEWAREGED
PRIMARY EXAMINER